IN THE SPECIFICATION

Please amend the paragraphs of the specification as follows:

Please replace the paragraph 1015 on page 4 with the following amended paragraph:

An example of an ECC technique is convolutional coding. In convolutional coding, binary data bits are input to a finite state machine (FSM), which produces one or more binary outputs for every input data bit. The outputs of this FSM are called code symbols. A typical method for constructing such ~~an FSM~~ a FSM is through one or more convolutional encoders, i.e., finite impulse response (FIR) binary digital filters operating using arithmetic in the Galois Field GF(2). If the code symbols are corrupted by noise and interference during transmission over a noisy channel, the data bits may still be recoverable through suitable inferences based upon the corrupted code symbols. Inferences are possible because the code symbols are "redundant", i.e., the code symbols contain information about not only the input data bits but also the "internal state" of the FSM. Methods for optimally inferring the input data bits from the received code symbols are known in the art and are commonly referred to as Trellis Decoding Algorithms, e.g., the Viterbi Algorithm, or the Stack Algorithm.

A1

Please replace the paragraph 1040 on page 11 with the following amended paragraph:

A2

$$f_k(\vec{\theta},d) \equiv \frac{1}{\sigma_t^2}\left\{\frac{(M/N)(\sigma_p^2/\sigma_t^2)+1}{(2/N)(\sigma_p^2/\sigma_t^2)}\left\|\vec{\theta}\right\|^2\right.$$

$$\left.-\frac{N}{(\sigma_p^2/\sigma_t^2)}\mathrm{Re}\{\vec{\theta}^H y\} - d\,\mathrm{Re}\{\vec{\theta}^H x_k\} - \sum_{j\in J-\{k\}}\left|\mathrm{Re}\{\vec{\theta}^H x_j\}\right|\right\}. \qquad \text{Equation 7}$$

Please replace the paragraph 1061 on page 12 with the following amended paragraph:

At step 530, define sets of indices as follows:

A3

$J = \{iK+1-\underline{M},\ldots,(i+1)K+\overline{M}\}$

$J' = \{iK+1-\underline{N},\ldots,(i+1)K+\overline{N}\}$ and

$N = \underline{N}+\overline{N}+K$

$M = \underline{M}+\overline{M}+K$.